# **CHANCROID**

#### DISEASE REPORTING

# In Washington

DOH receives approximately 5 (1995) to 0 (2001) reports of chancroid per year. Most cases occur among immigrants from, or travelers to, endemic areas.

# Purpose of reporting and surveillance

- To assure the adequate treatment of infected individuals in order to curtail infectiousness and prevent sequelae of infection.
- To identify, contact, and treat sexual contacts of reported cases in order to break the chain of transmission.
- To prevent HIV transmission.

# Reporting requirements

- Health care providers: notifiable to Local Health Jurisdiction within 3 work days
- Hospitals: notifiable to Local Health Jurisdiction within 3 work days
- Laboratories: no requirements for reporting
- Local health jurisdictions: notifiable to DOH Infectious Disease and Reproductive Health within 7 days of case investigation completion or summary information required within 21 days

#### CASE DEFINITION FOR SURVEILLANCE

### Clinical criteria for diagnosis

A sexually transmitted disease characterized by painful genital ulceration and inflammatory inguinal adenopathy. The disease is caused by infection with *Haemophilus ducreyi*.

## Laboratory criteria for diagnosis

• Isolation of *H. ducreyi* from a clinical specimen.

#### Case definition

- Probable: a clinically compatible case with
  - o one or more painful genital ulcers;

- the patient has no evidence of *T. pallidum* infection by darkfield exam of ulcer exudates or by a serologic test for syphilis performed at least 7 days after onset of ulcers;
- the clinical presentation, appearance of genital ulcers and, if present, regional lymphadenopathy are typical for chancroid; and
- a test for HSV performed on the ulcer exudates is negative. The combination of a painful ulcer and tender inguinal adenopathy, symptoms occurring in onethird of patients, suggests a diagnosis of chancroid; when accompanied by suppurative inguinal adenopathy, these signs are almost pathognomonic.
- Confirmed: a clinically compatible case that is laboratory confirmed.

#### A. DESCRIPTION

#### 1. Identification

An acute bacterial infection localized in the genital area and characterized clinically by single or multiple painful, necrotizing ulcers at the site of infection, frequently accompanied by painful swelling and suppuration of regional lymph nodes. Minimally symptomatic lesions may occur on the vaginal wall or cervix; asymptomatic infections may occur in women. Extragenital lesions have been reported. Chancroid ulcers, like other genital ulcers, are associated with increased risk of HIV infection.

A definitive diagnosis of chancroid requires identification of *H. ducreyi* on a special culture media that is not widely available from commercial sources; even using these media, sensitivity is less than 80%. No FDA-approved PCR test is available in the United States, but such a testing can be performed by commercial laboratories that have developed their own PCR test.

# 2. Infectious Agent

Haemophilus ducreyi, the Ducrey bacillus.

#### 3. Worldwide Occurrence

More often diagnosed in men, especially those who frequent prostitutes. Most prevalent in tropical and subtropical regions of the world, where the incidence may be higher than that of syphilis and may approach that of gonorrhea in men. The disease is much less common in temperate zones and may occur in small outbreaks. In the US, outbreaks and some endemic transmission have occurred, principally among migrant farm workers and poor inner city residents.

#### 4. Reservoir

Humans.

#### 5. Mode of Transmission

By direct sexual contact with discharges from open lesions and pus from buboes. Autoinoculation to nongenital sites may occur in infected people. Sexual abuse must be considered when chancroid is found in children beyond the neonatal period.

# 6. Incubation period

From 3 to 5 days, up to 14 days.

## 7. Period of communicability

Until healed and as long as the infectious agent persists in the original lesion or discharging regional lymph nodes, which lasts for several weeks or months without antibiotic treatment. Antibiotic therapy eradicates *H. ducreyi* and lesions heal in 1-2 weeks.

## 8. Susceptibility and resistance

Susceptibility is general; the uncircumcised are at higher risk than the circumcised. There is no evidence of natural resistance.

#### B. METHODS OF CONTROL

#### 1. Preventive measures:

- a. Preventive measures are those for syphilis (see Syphilis, B1).
- b. Follow all patients with nonherpetic genital ulcerations serologically for syphilis and HIV.

## 2. Control of patient, contacts and the immediate environment:

- a. Report to local health authority.
- b. Isolation: None; avoid sexual contact until all lesions are healed.
- c. Concurrent disinfection: None.
- d. Quarantine: None.
- e. Immunization of contacts: None.
- f. Investigation of contacts and source of infection: Examine and treat all sexual contacts within 10 days before onset of symptoms. Women without visible signs may rarely be carriers. Sexual contacts even without signs should receive prophylactic treatment.
- g. Specific treatment: azithromycin 1 gm PO single dose, or ceftriaxone IM 250 mg in a single dose, or ciprofloxacin 500 mg PO twice daily for 3 days [contraindicated for pregnant and lactating women] or erythromycin base 500 mg PO three times daily for 7 days. Worldwide, several isolates with intermediate resistance to either

ciprofloxacin or erythromycin have been reported. Fluctuant inguinal nodes should be aspirated through intact skin to prevent spontaneous rupture.

## 3. Epidemic measures

Persistent occurrence or an increased incidence is an indication for more rigid application of measures outlined in B1 and B2, above. When compliance with the treatment schedule (B2g) is a problem, consideration should be given to a single dose of ceftriaxone or azithromycin. Empirical therapy to high risk groups with or without lesions, including prostitutes, clinic patients reporting prostitute contact, and clinic patients with genital ulcers and negative darkfields may be required to control an outbreak.

#### 4. International measures

- a. Examine groups of adolescents and young adults who move from areas of high prevalence of infections.
- b. Adhere to agreements among nations (e.g., Brussels Agreement) as to records, provision of diagnostic and treatment facilities and contact interviews at seaports for foreign merchant seamen.
- c. Provide for rapid international exchange of information on contacts.
- d. WHO Collaborating Centres.